

## REMARKS

Reconsideration of the present application is respectfully requested. Claims 1-72 were originally presented. Claims 61, 62, 64-70, and 72 have been withdrawn as being drawn to a non-elected invention, and claims 1, 9, 17, 18, 20, 21, 24, 25, 27, 43, 46, 54, and 63 are amended herein. Claims 16 and 23 have been canceled, and claims 73-81 have been added so that claims 1-15, 17-22, 24-60, 63, 71, and 73-81 are presently pending. Claims 1, 63, and 73 are in independent form.

In the Office Action dated April 13, 2005, the Examiner states that affirmation of the election to prosecute the invention of Group I, claims 1-60, 63, and 71, must be made by applicants. Applicants hereby affirm the election to prosecute the invention of Group I.

In the Office Action, the Examiner states that claims 1-60, 63, and 71 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-63 of co-pending Application No. 10/780,989, as well as claims 1-49 and 66 of co-pending Application No. 10/780,987. Applicants have included herewith terminal disclaimers to obviate the obviousness-type double patenting rejections over co-pending Application Serial Nos. 10/780,989 and 10/780,987. Therefore, Applicants submit that the double patenting rejections have been overcome, and withdrawal of the same is respectfully requested.

In the Office Action, the Examiner rejects independent claims 1 and 63 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,783,850 to Takizawa et al. (hereinafter, Takizawa). For the reasons given below, Applicants submit that independent claims 1 and 63 are not anticipated by the prior art, including Takizawa.

Applicants have amended claims 1 and 63 to recite that the "tackifier resin has a residual monomer concentration of less than about 600 parts per million by weight based on the weight of said tackifier resin." In the Office Action, the Examiner states that, because Takizawa teaches polymerizing to a 100% degree of polymerization, then there is substantially no residual monomer concentration. (Office Action, p. 7, lines 9-12). However, Applicants submit that Takizawa neither expressly nor inherently

discloses a tackifier with a residual monomer concentration of less than about 600 ppm. Takizawa's disclosed method of "polymerizing the partial polymerizate to a degree of polymerization of substantially 100%" cannot reduce monomer concentration to the level recited in claims 1 and 63. (Takizawa, col. 15, lines 66-67). In fact, Inventive Example 1 of the present application shows that Applicants "further polymerized" the tackifier resin to substantially 100%, but could still not achieve a residual monomer concentration of less than about 600 ppm using this technique alone. In particular, Inventive Example 1 describes the post-addition of additional initiator to achieve further polymerization after the main polymerization step. (See, p. 33, lines 14-16). As discussed in further detail below, this "further polymerization" described in Inventive Example 1 achieved degrees of polymerization greater than 99.99%. However, even these high degrees of polymerization did not produce a tackifier resin having a residual monomer concentration of less than 600 ppm. The table provided below summarizes relevant portions of Table 3 from Inventive Example 1.

Initial Monomers	Styrene-Acrylic Tackifier Formulation I		Styrene-Acrylic Tackifier Formulation II	
Residual Monomers	Before Steaming	After Steaming	Before Steaming	After Steaming
Styrene (wt%)	61.2		24.9	
2-EHA <sup>1</sup> (wt%)	30.7		44.2	
Acrylic Acid (wt%)	1.7		1.5	
Styrene (ppm)	34	29	20	<10
2-EHA <sup>1</sup> (ppm)	476	12	990	40
Acrylic Acid (ppm)	218	110	-	134
Total Resid. Mon. (ppm)	728	151	1,010	<184
Degree of Polymerization	99.9993%	-	99.9989%	

Applicants submit that polymerization degrees of 99.9993% and 99.9989%, seen in the last line of the table provided above, are both substantially 100%. However, at this degree of polymerization the residual monomer concentration for both formulations was still greater than 600 ppm. Only after at least one additional step was taken (i.e., steaming), were Applicants able to achieve the desired low residual monomer

concentration. Thus, because, for example, Takizawa's disclosure of "further polymerizing...to a degree of polymerization of substantially 100%" does not expressly or inherently disclose a tackifier resin with a residual monomer concentration of less than about 600 ppm, not all elements recited in independent claims 1 and 63 are disclosed. Therefore, Takizawa cannot anticipate independent claims 1 and 63.

In the Office Action, the Examiner further rejected independent claims 1 and 63 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,028,484 to Martin et al. (hereinafter, Martin). Applicants submit that Martin does not anticipate independent claims 1 and 63, as amended. As noted above, Applicants have amended claims 1 and 63 to recite that the "tackifier resin has a residual monomer concentration of less than about 600 ppm by weight based on the weight of said tackifier resin." Nowhere is it found in Martin that the tackifier has a low residual monomer concentration. Nor would the recited low monomer concentrations of claims 1 and 63 be inherent in the tackifier of Martin. Thus, Martin does not disclose every element as recited in independent claims 1 and 63. Therefore, independent claims 1 and 63 should now be in condition for allowance. Additionally, because any claim depending from a patentable claim is also patentable, claims 2-15, 17-22, 24-60, and 71 which depend from claim 1, should also now be in condition for allowance.

In the Office Action, the Examiner further rejected claims 9 and 46 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The Examiner states that claim 9 discloses monomers which do not fall within the acrylate monomer category as recited in the preamble. Applicants have amended claim 9 to exclude sodium 1-allyoxy-2-hydroxylpropyl sulfonate, alkyl crotonates, vinyl acetate, di-n-butyl maleate, and di-octylmaleate. Thus, claim 9 should now be sufficiently definite under 35 U.S.C. § 112, second paragraph. Accordingly, Applicants request this rejection be withdrawn.

The Examiner states that, regarding claim 46, it is unclear if applicant is intending for the polymer to have all of the components of styrene, acrylic acid, and 2-ethylhexyl acrylate. Applicants have amended claim 46 to recite that the "tackifier resin comprises

repeating units of styrene and repeating units of acrylic acid and/or 2-ethylhexyl acrylate." This additional statement makes clear that the tackifier resin is to comprise styrene and either acrylic acid or 2-ethylhexyl acrylate or both. As for the recited concentration amounts regarding the acrylic acid and 2-ethylhexyl acrylate, it is clear that if only one of these monomer units is present, it will comprise from about 30% to about 80% of the total monomer repeating units in the tackifier. If both acrylic acid and 2-ethylhexyl acrylate are present in the tackifier, combined they will have a concentration of about 30% to about 80% of the total monomer repeating units. Thus, claim 46 should now be sufficiently definite under 35 U.S.C. § 112, second paragraph. Accordingly, Applicants respectfully request this rejection be withdrawn.

In the Office Action, the Examiner objected to claim 43 for using improper Markush language. Applicants have amended claim 43 to recite "selected from the group consisting of." Thus, claim 43 should now be in condition for allowance. Applicants respectfully request this objection be withdrawn.

Claims 73-81 have been added to further define the present invention. Applicants submit that independent claim 73 is patentable over the prior art of record, including Takizawa. Thus, claim 73 should be in condition for allowance. Additionally, because any claim depending from a patentable claim is also patentable, claims 74-81, which depend from claim 73, should also be in condition for allowance.

Applicants have amended claim 54 to depend from claim 48, instead of claim 1, to give claim 54 proper antecedent basis.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

An authorization to charge our deposit account in the amount of \$550.00 is enclosed herewith to cover the fees associated with the net addition of seven claims, one of which is independent.

Respectfully submitted,



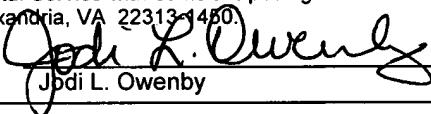
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I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.



Jodi L. Owenby

October 13, 2005  
Date